

The Impact of Psychological Capital, Supervisor Support and Risk Tolerance in Managers on Innovative Work Behavior

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Received for publication: 16 March 2018.

Accepted for publication: 12 July 2018.

Abstract

The present study intended to address the impact of positive psychological capital, supervisor support and risk tolerance in manager on innovative work behavior. The study emphasizes on the impression that employees who have positive psychological capital and receives support from their immediate supervisor/manager tend towards innovative work behavior on the job. In addition, employees whose manager allows them to take the risk can manage the external environment. Simple random sampling methodology was used to collect data from 11 private companies consist of the telecommunication sector, banks and IT sector of Lahore, Pakistan. Findings from 400 employees by applying regression technique revealed that positive psychological capital, supervisor support and risk tolerance in manager have a positive impact on innovative work behavior. Results of the study highlight the importance of inculcating a positive work environment, support of the supervisor, which leads to the competitiveness of the organization. The limitations of the study and future research directions are discussed. Results underscore the importance of considering the direction of the positive work environment.

Keywords: Positive Psychological Capital, Supervisor Support, Risk Tolerance in Manager and Innovative Work Behavior

Introduction

The concept of innovative work behavior is highly concerned nowadays to pick up a competitive advantage in a dynamic and complex world; organization should focus on innovative workplace behavior (McAdam and Keogh, 2004). Especially, worker creative practices are imperative assets that make organizations effective in powerful business conditions (Yuan and Woodman, 2010). In addition, organizations should involve creative individuals to maintain their competitive nature (Zhou and Shalley, 2008). Acknowledging the significance of innovation at workplace for the success of organization research has focused on the factors that invigorate innovative practices in the working environment.

Another important area, which helps organization to sustain in competitive advantage, is psychological capital. The idea of Psychological Capital (Psychological Capital) was initially intended for organizations and employees, the motive was to explore or to investigate the individual mental strength. Pioneer of this concept Fred Luthans proposed that development in organizations needs to concentrate on the mental state of individuals as opposed to other advancement factors. Luthans contended that HR could fill in as an upper hand as they are more supreme by competitors than physical, basic and financial assets.

Luthans further contended that individual has two sorts of learning: 1) explicit knowledge and 2) tactic knowledge. Explicit or Expressive information incorporates abilities, capacities, and skills, that individual gets from education and practical experience. Tactic knowledge is Inferred

learning; this knowledge is worked after some time through socialization into the organization. Luthans asserted that tacit learning offers a competitive advantage to the organization as this knowledge is uniquely combined with different aspects and it is a non-transferable aspect to the competitors. In light of this, though the importance of individual mental health has been overstretched (Luthans and Youssef, 2004). Thus, positive nature people move towards positive expectations about their outcomes (Patera, 2008), research says that people who have high expectations are more innovative (Sousa & Cunha, 2012), this study also proposed that people who are high in the psychological capital are more likely to work innovatively at work. As Positive thinkers apparently exhibit positive notions about the outcomes (Avey & Patera, 2008).

Social organization support is also a prominent factor that enables the organization to grow (Zhong, Wayne, & Liden, 2016). Supervisor support helps subordinate to increase productivity.

Supervisors motivate with interactive skills due to understanding level and provide Innovative ideas for the Job- Innovation. Supervisors provide feedback and job-innovation related information that helps to their subordinates related to innovation (Moos, Cashx, & Cowie, 2000). Supervisor and manager risk tolerance approach allows a subordinate to work freely with their ideas. Employees give their best result related to innovation if their supervisors provide their best feedback and support for new ideas (Salysers & Amabile-Cuevas, 1997). Risk tolerance is the degree of risk that manager or supervisor is ready to take to ready to bear. The study proposed that if manager or supervisor were risk taker then their subordinates probably would execute innovative work on a day-to-day basis. Likewise, manager allows their subordinates to take the risk in the workplace and accept their innovative nature of work (Greve, 2003). A person's innovative practices are the composite of complex behavioral errands including idea promotion, idea generation and idea generation (Janssen, 2001). Researchers have recommended that a wide range of innovation be supported by managerial behavior and action (Hayes, 2016). Likewise, this study also going to determine the impact of supervisor support and risk tolerance in manager behavior toward innovation work behavior at the workplace.

The purpose of the study is that psychological capital, supervisor support and risk tolerance in managers has an impact on innovative work behavior. Probably, in Pakistan, there has been the rarity of research, which investigates the relationship between psychological capital, supervisor support and risk tolerance in manager toward work innovative behavior at the workplace. Consequently, this study will put forward the association between the two concepts and can help to promote the importance of psychological capital at the workplace in employees and managerial behavior in terms of support and risk tolerance.

Literature Review

Literature indicates that the agentic work behavior will increase just due to Positive Behaviors of an employee, to clarify this normal substance and procedure to date, psychological capital of individual is imperative (Whetten, Felin, & King, 2009). In Positive psychological literature, psychological capital is very essential to take note as well as more included integral assets (Wang, Sui, Luthans, Wang, & Wu, 2014).

It is the work of Luthans (Luthans, 2002a, 2002b) that the value of positive psychology to organizations and organizational learning is more evident. The positive organizational behavior is to bring the concepts and applications of positive psychology in the workplace (Luthans 2002a). Positive organizational behavior, active-oriented, such as the application of research and human resource strengths and psychological function, can be measured, developed and then management in order to improve the performance (Luthans, 2002b). Luthans and colleagues (2007A) explicate the

psychological capital as a positive state of mind of an individual that could be developable, and it is featured by (1) is taken, confidence (self-efficacy) to put the effort necessary to be successful in interesting work, (2), for the current and future successor to make a positive attribution (optimism) (3) and save it to the target, if necessary, redirect to be successful, the purpose of the passage (hope) and (4) is carried out in order to be successful, rebound, and even beyond (resilience), and suffers from problems and adversities.

Psychological capital is a composition that let researchers accelerate their research on perceptions of organizational behavior. Thus, by extending the scope of association POB (Luthans & Youssef, 2004) this configuration is defined as the main component of the excellent competitive organization. It is to define a central structure of the psychology of capital (Psychological Capital) measured on these four volumes. In this section, the study explains these buildings and basic configuration Psychological Capital respectively. They have also discussed the impact that has the results of the satisfaction and commitment.

Psychological capital is observed the higher level of logic in terms of Positive orders (Luthans & Youssef, 2007). The positive Psychological capital has been observed to be identify with different types of employment results for example job satisfaction (Abbas et al., 2014; Luthans, Avolio, Avey, & Norman, 2007), turnover intentions (Avey, Luthans, & Youssef, 2010), and cynicism (Avey, Wernsing, & Luthans, 2008). However, the different types of studies related to PsyCap have been observed in North America and most important in the US, In the Non-US settings there are the several studies related to Psychological capital on job results (Abbas et al., 2014; Luthans, Combs, Clapp-Smith, & Nadkarni, 2006).

Positive Psychological capital is oriented towards the outcomes from one's job such as job satisfaction and performance (Luthans, Avolio, Avey, & Norman, 2007), commitment towards job (Avey, Luthans, & Youssef, 2010) and skepticism (Avey, Wernsing, & Luthans, 2008). Majorly studies on PsyCap have been conducted in North America specifically in the US and fewer studies in non-US areas (Abbas, Raja, Darr, & Bouckenoghe, 2014; Luthans, Combs, Clapp-Smith, & Nadkarni, 2006).

Psychological Capital and Innovative Behaviors:

Moreover, the influence of different types of psychological resources volumes of innovation related studies have been analyzed, all these resources have been connected individually with innovation and innovation-related ideas and results. In the work environment, the research proposes that the positive Psychological resources of adequacy, strength and good faith can possibly activate according to the innovative practices. In any case, these assets do not act in separation. Rather, they offer help for each other through a hidden shared component (Fredrickson, 2001; Hobfoll, 2002) thus, they ought to be considered overall (Abbas et al., 2014). Hope is the best method to produced Innovation and goal can be complete through different kinds of strong strategies related to innovative ideas (Luthans & Youssef, 2007). Furthermore, masterminds people have an ability to high hope related to innovative ideas (Norman, 2007). In the spending plans most of the employees who have hopeful related to their innovative ideas learning to move more imaginative and energetic (Avolio, Avey, & Norman). Studies have been conducted to look into the effect of the capacity of psychological resources on innovative behaviors and the results showed that if the resources related to positive psychological behavior are in abundance in behavior then they have the capability to foster positive and creative behaviors in the workplace.

These behaviors do not appear in individuality they tend to appear in the group setting where there exists a system of sharing (Boekaerts, 2002) and to gain a deep insight into the relationship group settings must be used for research (Abbas, Raja, Darr, & Bouckenoghe, 2014). As indicated by Broaden-and-build theory, individual's temporary thoughts that are stored in terms of action or

storehouses and expend the different types of thought arrangements and practical's that is related to their mindset just due to share the ability of positive emotions in terms of expend (Bakker & Demerouti , 2008). In this way expanding the potential for the exhibit of inventive practices, for example, sharing imaginative thoughts and giving recommendations to upgrades at work (Avey & Reichard, 2011). From the literature discussion, we hypothesize that:

H1: Psychological capital has the positive impact on innovative work behavior.

Supervisor Support and risk tolerance in manager:

Supervisors motivate different proactive personalities with interactive skills due to understanding level and provide Innovative ideas for the Job- Innovation. Supervisors provide different kinds of feedback and job-innovation related information that helps to their subordinates related to innovation (Allen, & Shanock, 2013; Moos, Cashx, & Cowie, 2000). Employees give their best result related to innovation if their supervisors provide their best feedback and information related to innovative ideas (Nica, 2016).

Accordingly, employees can increase their job- innovation due to the high supervisor support in terms of innovative ideas because in this way, innovative ideas were identified more useful and innovation was limited that is related with future risk (Eisenberger, Armeli, Rexwinkel, Lynch, & Rhoades, 2001). The final example is related to proactive employees because innovative job activities and supervisory support for innovative ideas are more suitable for proactive employees (Shanock, & Eisenberger, 2006). Most organizations highlight innovation as a basic tool that generates from high work innovation and best guidance for innovative ideas were suitable for proactive persons because most of the people moved towards innovative activities and achieve different goals related to innovative ideas. Moreover, (Erdogan & Bauer, 2005) describes that Proactive Employees are more satisfied with their jobs and profession if their workplace and activity qualities matched with their Proactive propensities.

On the other hand, if the supervisors refuse to help their employees in innovative ideas, it might be the reason that future risk related with the innovative performance was not so important in this way, extra efforts for innovative ideas identified in terms of low tendency. With these differences between high-level job requirements and weak interest of supervisor towards their activities, employees will not interested or stop taking any kind of risk that will relate to future risk because future risk mostly related to innovative ideas. Risk tolerance in manager is the degree of risk that manager or supervisor is ready to take to ready to bear. Literature depicts that if manager or supervisor is risk taker then their subordinates probably will execute innovative work on a day-to-day basis (Latham, & Braun, 2009). Likewise, manager allows their subordinates to take the risk at a workplace and accept their innovative nature of work (Greve, 2003).

The most important part of the employees understanding level for their supervisors and risk tolerance capacity in their supervisor in which employees can be determined creative approach, supportiveness can participate as average (Tan, 2001). When the innovation of employees are not satisfactory then the supervisor will not be supportive and employees suppose that supervisory support is not much important part to get their impact. Furthermore, for innovation purpose, most of the supervisor get help from their colleagues and top-level hierarchy on the back safe side (Brown, 2010). Employees are strongly depended on their Supervisors just for the sake of information in which included (skill, political knowledge), assets (materials, space, time), and sociopolitical bolster (support, authenticity, backing) to create, ensure, and understand their new thoughts (Kanter, 1988; Aghion, Van Reenen, & Zingales, 2013). From the literature discussion, we hypothesize that:

H2: Supervisor Support has the positive impact on innovative work behavior.

H3: Risk Tolerance in manager has the positive impact on innovative work behavior.

Methodology

The given study tests the psychological capital, social organizational support and risk tolerance behavior of employees on innovative work behavior. The current study prevails positivism approach as its more scientific approach and provides objective data (Bryman and Bell, 2015). This study is cross-sectional base studies conducted at only one interval of time. Questionnaire method was adopted to gather data impacts psychological capital, social organizational support and risk tolerance behavior on innovative work behavior. Description of study and purpose of the study was written on the questionnaire. The well-established variables have been examined to demonstrate the variance of the dependent variable by a predicted one that is positive state of individual mind. The sample size of the study consisted of 400 employees (n=400) from various private organizations of Lahore, including commercial banks (Faysal Bank, Askari Bank, Albaraka Bank & United Bank Limited), telecommunication sector (Telenor and Jazz/Warid) and IT sector (Tower Technologies, Future Vision Technologies, Power Information Technology Company (PITC), Expert IT Solution and Pak Developers) Lahore,. Simple random sampling was used to collect data from individuals, as the unit of analysis was individuals.

Measures

Psychological capital : Psychological capital was adopted by Luthan, Yousef & Avolio (2007), 12 item scale with 6 points Likert scale, 1 strongly disagree with 6 strongly agree. This scale consists of 4 dimensions of psychological capital; hope, resilience, optimism, and self-resilience.

Social Organization support: social Organizational support was measured by its two-dimension coworker support and supervisor support. We took supervisor support in this study. Supervisor support was gauged using a 7 item questionnaire developed by Hammer et al (2009). Responses were given on five Likert scales ranging from 1 “Strongly disagree” to 5 “Strongly Agree”.

Innovative work behavior Innovative work behavior is based on the scale proposed by Janssen (2000) including nine items by 5 Likert scale.

Risk tolerance in manager: Risk tolerance in manager is measure by Wallach and Kogan (1959) developed the choice dilemmas questionnaire (CDQ) about everyday life situation of risk with 7 Likert scales.

Procedure

A total sample of employees in this study is used as 400 employees from private organizational of Lahore. The simple random strategy was used as this method is representative of population and size of the sample was defined by Tabachnick & Fidell, (2007) sampling strategy. To collect data, 1000 questionnaires were circulated in organizations, 482 questionnaires were returned which was filled but few of them was filled with carelessness; for the effective response that study removes those questionnaires to improve the quality of data and had a sample of 400 individuals. The response rate was 40.0%.

Results

400 respondents of employees are total sample in which 301 were male which 75.25% respondents was and 99 was female which was 24.75% respondents. The mean age of the respondents are 31.74, ranges from 20 to 56. The qualification of respondents is that most employee has a masters qualification 70.25 % (n=281), graduates are 22% (n =88) and M.Phil. are 7.75% (n= 31). Reliability of variables has been demonstrated and different items measure constructs. Psychological capital is 0.73. Supervisor support reliability is 0.81. Risk tolerance in manager reliability is 0.76 and innovative work behavior reliability is 0.84. Reliability analysis shows satisfactory result.

The given table demonstrates the relationship between variables with the significance level. Therefore, the relationship between the psychological capital and work innovative behavior is $r = 0.379^{**}$. This shows the positive significant relationship between psychological capital and works innovative behavior as p-value is less than 5%. The relationship between the supervisor support and work innovative behavior is $r = 0.452^*$, shows the positive significant relationship as p-value is less than 5%. The relationship between the risk tolerance in management and work innovative behavior is $r = 0.273^*$. This shows the positive significant relationship as p-value is less than 5%.

Table 1 Correlation Analysis

	Psychological Capital	Supervisor Support	Risk Tolerance in Manager	Innovative Work Behavior
Psychological Capital	1			
Supervisor Support	0.159	1		
Risk Tolerance in Manager	0.228*	-0.121	1	
Innovative Work Behavior	0.379**	0.452*	0.273*	1

In statistical analysis regression, an analysis is used to analyze the impact and variance of variables. A simple regression technique is used to predict the impact of psychological capital, supervisor support and risk tolerance in management towards work innovative behavior.

This study utilized a 400 sample on SPSS version 21; for the effect of demographic variables, the study used one-way ANOVA to investigate the demographic effects of work innovative behavior. Qualification and Gender are found to be noteworthy with work innovative behavior.

In regression, the first step consists on entering all demographic variables in order to control them, afterward psychological capital, supervisor support and risk tolerance in management had been regressing purpose to leave an impact on work innovative behavior.

The study hypothesizes first, psychological capital has a positive relationship with innovative work behavior, the regression analysis depicts that psychological capital has a positive impact on innovative work behavior ($\beta = 0.334^{**}$, $p < 0.00$), the r square shows 21.1% variance in innovative work behavior because of psychological capital. Thus, H1 is accepted. Second, hypothesizes that supervisor support has a positive impact on innovative work behavior, the regression analysis depicts that supervisor support has a positive impact on work innovative behavior ($\beta = 0.401^*$, $p < 0.05$), the r square shows 18.3% variance in innovative work behavior because of supervisor support. Thus, H2 is also accepted.

Third hypothesizes that risk tolerance in manager has a positive impact on innovative work behavior, the regression analysis depicts that risk tolerance in manager has a positive impact on work innovative behavior ($\beta = 0.148^*$, $p < 0.05$), the r square shows 08.3% variance in innovative work behavior because of risk tolerance in the manager. Thus, H3 is also accepted.

As this study is based on human behavior, usually variance (R square values) is lower in human behavior study because human's behavior is stiffer to predict as compared to other disciplines. Besides this, variance (R-squared value) is low in this study but we found statistically significant support for a predicted variance so the study can draw a conclusion regarding results of

psychological capital, supervisor support and risk tolerance in management towards work innovative behavior.

Table 2 Regression Analysis

	Innovative Work Behavior	
	Unstandardized β	Change in R Square
Age	-0.102	0.008
Gender	-0.269	0.071*
Qualification	0.198	0.126
Experience	-0.057	0.002
Psychological Capital	0.334*	0.211*
Supervisor Support	0.401*	0.183*
Risk Tolerance in Manager	0.148	0.083*

Discussion

The purpose of the study is to test the psychological capital, supervisor support, and risk innovative behavior on innovative work behavior of employees. Results revealed that psychological capital; supervisor support and risk innovative behavior has the positive effect on innovative work behavior of employees. Findings are similar with the Sweetmen, Luthans, Avey, & Luthans (2011) findings that states that employees who have positive psychological capital are more tend toward the execution of innovative work at their workplace than those who possess low positive psychological capital. This study results showed that employees more towards taking initiatives in idea generation process and realization of a unique idea at their workplace as they have a strong mental capacity. Since they have strong mental approach, positive nature and resilient approach, such employees can better handle the stress and ability to stay focus in their given task (Abbas & Raja, 2015), however not only focus on their work even they work depicts creativity and uniqueness.

Recently, Kim, Eisenberger, & Baik (2016) conducted a study and results demonstrate that there is a positive association between supervisor support at workplace and employee creative productivity, similar this study also find a support that those employees who receive support from their supervisor or manager at workplace, they are more likely toward the work innovation.

Final objectivity of the research is risk tolerance of manager and subordinates innovative work behavior. Risk tolerance is the degree of risk that manager or supervisor is ready to take to ready to bear. The result shows that if manager or supervisor is risk taker then their subordinates probably will execute innovative work on a day-to-day basis. Likewise, manager allows their subordinates to take the risk in the workplace and accept their innovative nature of work (Greve, 2003).

A behavioral theory provides a solid support for ideas decision making for innovation, complements by the risk-taking approach, integrating into both supervisors, and subordinates for the innovative work behavior at the workplace (Cyert & March 1963, Greve, 2003). The most important part of the employees understanding level for their supervisors in which employees can be determined creative approach, supportiveness can participate as average. When the innovation of employees are not satisfactory then the supervisor will not be supportive and employees suppose that supervisory support is not much important part to get their impact. Furthermore, for innovation purpose, most of the supervisor get help from their colleagues and top-level hierarchy on the back safe side.

Conclusion

This paper intended to address the impact of positive psychological capital, supervisor support and risk tolerance in managers has an impact on innovative work behavior. Therefore, this study put forward the relationship of the concepts; assist in enduring the behavior to promote the importance of psychological capital at the workplace in employees and managerial behavior in terms of support and risk tolerance.

Practical Implication

A study has practical implication for practitioners as psychological capital is made of state-like asset and is not a static its available for improvement (Luthans, Avey, and Patera, 2008), supervisors and managers can build up in their employees and support their employees for the innovative work behavior. This will enable workers to encourage new and inventive methods for achieving their job task. High psychological capital people, because of their constructive mental assets, may offer an upper hand to their organization. High-risk tolerant manager and supervisor enable their employees to work freely with their idea at the workplace.

Limitation and Future Research Direction

Despite the strength of the study, this study has few limitations. First, the study consists of cross-sectional data, a longitudinal result on behavioral sciences may yield better results. Second, the finding is based on self-reported data. Third, an important limitation of the study was the small sample size; the significant limitation is the small sample size, interpretation of results, especially confidence intervals and p values, Data may not be robust enough to explain complex issues.

The innovative work behavior has turned out to be basic for the employees to survive in the dynamic environment. The practitioners would thus be able to utilize it to enhance the effectiveness of the organization as psychological capital, supervisor support and risk tolerance in manger and innovation at the workplace can advance their resources more profoundly over time. As it has been discussed above that psychological, capital is open to development. For the future study, this model could be tested as by other outcomes like task performance, organizational performance, leader-member exchange relation, interpersonal conflicts, and stress. Moreover, further study should incorporate the specific industry where innovation is highly concerned with the psychological capital and innovative work behavior.

References

- Abbas, M., & Raja, U. (2015). Impact of psychological capital on innovative performance and job stress. *Canadian Journal of Administrative Sciences/Revue Canadienne des Sciences de l'Administration*, 32(2), 128-138.
- Abbas, M., Raja, U., Darr, W., & Bouckenooghe, D. (2014). Combined effects of perceived politics and psychological capital on job satisfaction, turnover intentions, and performance. *Journal of Management*, 40(7), 1813-1830.
- Aghion, P., Van Reenen, J., & Zingales, L. (2013). Innovation and institutional ownership. *American economic review*, 103(1), 277-304.
- Allen, D. G., & Shanock, L. R. (2013). Perceived organizational support and embeddedness as key mechanisms connecting socialization tactics to commitment and turnover among new employees. *Journal of Organizational Behavior*, 34(3), 350-369.
- Avey, J. B., Luthans, F., & Youssef, C. M. (2010). The additive value of positive psychological capital in predicting work attitudes and behaviors. *Journal of management*, 36(2), 430-452.

- Brown, L. (2010). Balancing risk and innovation to improve social work practice. *British Journal of Social Work*, 40(4), 1211-1228.
- Cyert, R. M., & March, J. G. (1963). A behavioral theory of the firm. Englewood Cliffs, NJ, 2, 169-187.
- Demerouti, E., Bakker, A. B., De Jonge, J., Janssen, P. P., & Schaufeli, W. B. (2001). Burnout and engagement at work as a function of demands and control. *Scandinavian journal of work, environment & health*, 279-286.
- Eisenberger, R., Armeli, S., Rexwinkel, B., Lynch, P. D., & Rhoades, L. (2001). Reciprocation of perceived organizational support. *Journal of applied psychology*, 86(1), 42.
- Fredrickson, B. L. (2001). The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *American psychologist*, 56(3), 218.
- Greve, H. R. (2003). A behavioral theory of R&D expenditures and innovations: Evidence from shipbuilding. *Academy of management journal*, 46(6), 685-702.
- Hammer, L. B., Kossek, E. E., Yragui, N. L., Bodner, T. E., & Hanson, G. C. (2009). Development and validation of a multidimensional measure of family supportive supervisor behaviors (FSSB). *Journal of Management*, 35(4), 837-856.
- Hayes, S. C. (2016). Acceptance and Commitment Therapy, Relational Frame Theory, and the Third Wave of Behavioral and Cognitive Therapies—Republished Article. *Behavior therapy*, 47(6), 869-885.
- Hobfoll, S. E. (2002). Social and psychological resources and adaptation. *Review of general psychology*, 6(4), 307.
- Janssen, O. (2000). Job demands, perceptions of effort reward fairness and innovative work behaviour. *Journal of Occupational and organizational psychology*, 73(3), 287-302.
- Kim, K. Y., Eisenberger, R., & Baik, K. (2016). Perceived organizational support and affective organizational commitment: Moderating influence of perceived organizational competence. *Journal of Organizational Behavior*, 37(4), 558-583.
- Latham, S. F., & Braun, M. (2009). Managerial risk, innovation, and organizational decline. *Journal of Management*, 35(2), 258-281.
- Luthans, F., & Youssef, C. M. (2004). Human, social, and now positive psychological capital management: Investing in people for competitive advantage.
- Luthans, F., & Youssef, C. M. (2007). Emerging positive organizational behavior. *Journal of management*, 33(3), 321-349.
- Luthans, F., Avey, J. B., & Patera, J. L. (2008). Experimental analysis of a web-based training intervention to develop positive psychological capital. *Academy of Management Learning & Education*, 7(2), 209-221.
- Luthans, F., Avolio, B. J., Avey, J. B., & Norman, S. M. (2007). Positive psychological capital: Measurement and relationship with performance and satisfaction. *Personnel psychology*, 60(3), 541-572.
- Luthans, F., Combs, G., Clapp-Smith, R., & Nadkarni, S. (2006). Knowledge workers in India: Exploring the relationship of hope and optimism with performance. In *Academy of management annual conference*.
- Luthans, F., Youssef, C. M., & Avolio, B. J. (2007). *Psychological capital: Developing the human competitive edge*(p. 3). Oxford: Oxford University Press.
- McAdam, R., & Keogh, W. (2004). Transitioning towards creativity and innovation measurement in SMEs. *Creativity and Innovation Management*, 13(2), 126-139.

- Nica, E. (2016). The effect of perceived organizational support on organizational commitment and employee performance. *Journal of Self-Governance and Management Economics*, 4(4), 34-40.
- Rego, A., Sousa, F., Marques, C., & e Cunha, M. P. (2012). Authentic leadership promoting employees' psychological capital and creativity. *Journal of Business Research*, 65(3), 429-437.
- Shalley, C. E., & Zhou, J. (2008). Organizational creativity research: A historical overview. *Handbook of organizational creativity*, 331.
- Shanock, L. R., & Eisenberger, R. (2006). When supervisors feel supported: Relationships with subordinates' perceived supervisor support, perceived organizational support, and performance. *Journal of Applied psychology*, 91(3), 689.
- Sweetman, D., Luthans, F., Avey, J. B., & Luthans, B. C. (2011). Relationship between positive psychological capital and creative performance. *Canadian Journal of Administrative Sciences/Revue Canadienne des Sciences de l'Administration*, 28(1), 4-13.
- Tabachnick, B. G., & Fidell, L. S. (2007). *Using multivariate statistics*. Allyn & Bacon/Pearson Education.
- Tan, J. (2001). Innovation and risk-taking in a transitional economy: A comparative study of Chinese managers and entrepreneurs. *Journal of business venturing*, 16(4), 359-376.
- Wallach, M. A., & Kogan, N. (1961). Aspects of judgment and decision making: Interrelationships and changes with age. *Systems Research and Behavioral Science*, 6(1), 23-36.
- Wang, H., Sui, Y., Luthans, F., Wang, D., & Wu, Y. (2014). Impact of authentic leadership on performance: Role of followers' positive psychological capital and relational processes. *Journal of Organizational Behavior*, 35(1), 5-21.
- Whetten, D. A., Felin, T., & King, B. G. (2009). The practice of theory borrowing in organizational studies: Current issues and future directions. *Journal of Management*, 35(3), 537-563.
- Yuan, F., & Woodman, R. W. (2010). Innovative behavior in the workplace: The role of performance and image outcome expectations. *Academy of Management Journal*, 53(2), 323-342.
- Zhong, L., Wayne, S. J., & Liden, R. C. (2016). Job engagement, perceived organizational support, high performance human resource practices, and cultural value orientations: A cross level investigation. *Journal of Organizational Behavior*, 37(6), 823-844.
- Zhong, L., Wayne, S. J., & Liden, R. C. (2016). Job engagement, perceived organizational support, high performance human resource practices, and cultural value orientations: A cross level investigation. *Journal of Organizational Behavior*, 37(6), 823-844.